## Delta Operations for Salmonids and Sturgeon (DOSS) Group Conference call: 5/31/11 at 9:00 a.m.

**Objective:** Provide advice to the Water Operations Management Team (WOMT) and National Marine Fisheries Service (NMFS) on measures to reduce adverse effects from Delta operations of the Central Valley Project and the State Water Project on salmonids and green sturgeon. DOSS will coordinate the work of other technical teams. DOSS notes and advice can be found at: http://swr.nmfs.noaa.gov/ocap/htm

DWR: Andy Chu, Mike Ford, Angela Llaban, Cynthia LeDoux-Bloom

FWS: Roger Guinee, Nick Hindman

NMFS: Barbara Rocco, Bruce Oppenheim, Barb Byrne, Jeff Stuart

**DFG**: Dan Kratville

**Reclamation:** Thuy Washburn **EPA**, **SWRCB:** not present

## Agenda

1) Fish monitoring data

- 2) Project operations
- 3) VAMP and San Joaquin River flows

**Fish Monitoring:** The following table presents the fish monitoring data from 5/22 to 5/29/11. For additional info: <a href="http://www.water.ca.gov/swp/operationscontrol/calfed/calfedmonitoring.cfm">http://www.water.ca.gov/swp/operationscontrol/calfed/calfedmonitoring.cfm</a>

**NOTE**: Because of the holiday on Monday, DOSS did not receive the usual fish data from USFWS monitoring sites and from the fish salvage facilities before the call.

Location	Chipps Is. Midwater Trawl	Sacramento Kodiak Trawl	Mossdale Kodiak Trawl	Beach Seines	Knights Landing RST	Tisdale Weir RST	Moulton Weir RST
Sample Date	N/A	N/A	5/22-5/27	N/A	5/22, 25, 27, 29	5/23-5/29	N/A
<b>Total Catch</b>			627		21	31	
FR			463		19	29	
LFR							
WR							
SR							
(Ad-clips)			163		2	2	
DS							
LFS							
SPTL							
SH (ad-clip)							
SH (natural)			1 (239 mm)				
Water Temp. (avg. °F)					64.5	60.5	
Flows (avg. cfs)					12,295	12,600	

Turbidity (avg. NTU)	17.0	11.0	
FR/SR Avg. CPUE	1.17	2.25	
WR/LFR Avg. CPUE	0	0	

**Key**: FR = Fall run; LFR = Late-fall run; SR = Spring run; WR = Winter run; SH = Steelhead; DS = Delta smelt; LFS = Longfin smelt; SPTL = Splittail.

<u>Tisdale:</u> Data from 5/23 to 5/29 showed that water temperatures are increasing, averaged 60.0°F for the week, and turbidity is decreasing. Daily Chinook numbers are dropping from 25 to 4 fish/day. Maximum size is about 90 mm.

Mossdale: DFG switching from 7 days/week to 5 days/week beginning this week. They are catching about 50 hatchery fish/day. There was a low of 29 non-clipped Chinook, then it went up to 162 per day; the pulse of the fish came through on 5/22 and 5/23; the cumulative for the season for non-clipped Chinook is 1,777 with an average length of 101 mm. Some escaped the net; some had a purple lower caudal stain; 1 natural steelhead was caught on 5/24 at 239 mm (smolt) and was the fourth steelhead caught this year since 3/4/11. There was no indication that it was tagged.

<u>Knights Landing</u>: Total catch of Chinook dropped from 12 to 2 fish/day.

Chinook Loss Density: Loss density for older juvenile Chinook has been zero for the week.

## **Steelhead Loss Density:**

## SWP & CVP WILD STEELHEAD LOSS & LOSS DENSITY 05/23/2011 through 05/30/2011

	WILD	STEELHE	Combined wild steelhead loss density Loss Density	
Date	SWP	CVP	Combined	(fish/TAF)
5/23/2011	0.00	0.00	0.00	0.00
5/24/2011	0.00	0.00	0.00	0.00
5/25/2011	17.32	0.00	17.32	3.49
5/26/2011	0.00	0.00	0.00	0.00
5/27/2011	51.96	0.00	51.96	10.64
5/28/2011	17.32	0.00	17.32	3.52
5/29/2011	0.00	0.00	0.00	0.00
5/30/2011	0.00	0.00	0.00	0.00

DWR-DES 5/31/2011

Preliminary, subject to revision

Steelhead loss density exceeded the first stage OMR trigger in the NMFS BiOp (8.0 fish/TAF) on 5/27 at 10.64/TAF (= 3 fish observed at the SWP for an expanded salvage of 12). No non-clipped steelhead were salvaged at the CVP. Action IV.2.3 for steelhead requires an OMR flow of no more negative than -3,500 cfs for 5 days. However, on June 1, 2011, exports are allowed

<sup>\*</sup>SWP loss = salvage \* 4.33, CVP loss = salvage \* 0.68

to increase to 1:1 ratio (San Joaquin flow at Vernalis: Exports) as part of action IV.2.2 (6-Yr Acoustic Study). If the OMR action response continues for the next 5 days, OMR could be the controlling factor by the weekend. There was a discussion about whether to begin the OMR action response today (5/31) or last Saturday (5/28) as the first day for compliance notification and allow 2 days for implementation. DOSS agreed to start on Saturday (5/28) because even if it had been notified over the weekend, existing restrictions were meeting the OMR required action response.

Currently, the I:E ratio of 4:1 (action 4.2.1) is in effect until 6/1, which is more restrictive than the OMR action 4.2.3. Since OMR flows have been positive under implementation of the 4:1 I:E ratio since Sat., no operational changes were necessary over the weekend to achieve this action response under Action IV.2.3. DWR is willing to target OMR flows no more negative than -3,500 cfs by 6/1/11 (5 days from date triggered). Since the Vernalis flows are close to 10,000 cfs now, the combined exports would be controlled by the new 1:1 ratio (action 4.2.2) starting tomorrow (6/1) and still meet the -3,500 cfs OMR requirement. If loss density on 6/2/11 is below the first stage trigger of 8.0 fish/TAF, the projects can target OMR flows no more negative than -5,000 cfs on the SWP side. USGS re-rated the Vernalis CDEC gage on 5/27 and it went up 1,000 cfs, which complicates predicting which action would be controlling. However, it was noted that OMR flow data are independent of the Vernalis gage and are measured directly. DOSS acknowledges that although the steelhead trigger was met for one day, it did not need to advise a change in operations, since OMR flows were positive, and the RPA action 4.2.3 was being met.

**Smelt working group (SWG) update:** SWG notes are posted on the FWS website at: <a href="http://www.fws.gov/sfbaydelta/ocap/">http://www.fws.gov/sfbaydelta/ocap/</a>

The SWG met concurrently this morning and had no recommendations. A delta smelt was captured at Franks Tract. There was a concern that delta smelt are in the western Delta. There seem to be less delta smelt overall this year. The level of concern for June is 958, with a take limit of 1,436; the level of concern for July is 1,086, with a take limit of 1,630. Four of 5 delta smelt were seen in the Mokelumne system; therefore if OMR flows change, there is a potential for an impact on them.

**Operations (May 31, 2011)** 

SW	P	CVP					
Exports (cfs)							
Clifton Court Forebay	1,500	Jones Pumping Plant	1,000 today				
			(4,200 on				
			6/2)				
	Reservoir releases						
Feather - Oroville	Down from	American - Nimbus	5,000 (up				
	7,000 to 6,000		tomorrow)				
	today						
		Sacramento - Keswick	11,500				
		Stanislaus - Goodwin	1,500				
Reservoir Storage (TAF)							
San Luis (SWP)	935	San Luis (CVP)	904				
Oroville	3,397	Shasta	4,483				
		Folsom	876				

		New Melones			
Delta Operations					
DCC	Closed	Sacramento River at Freeport	34,938		
Outflow Index (cfs)	43,400	San Joaquin at Vernalis	10,346		
Total Delta Inflow	48,810	OMR (daily)			
Water Temperature (°F)		OMR 5 day	+2,311		
X2 (km)	61	OMR 14 day	+2,506		
E/I	4.8%				

<u>Weather forecast</u>: Small system coming in this week (0.3 inch Weds and 0.2 on Thurs, 0.5 inch on Sunday), but the cold trend will continue. The cold trend is keeping water temperatures low in the Sacramento and San Joaquin Rivers. There's not a lot of snow left at 6,000 ft.

<u>VAMP fish releases</u>: A question was raised about whether the steelhead and salmon releases are still scheduled for the Wednesday (6/8) release. There was no consensus. The Delta barrier construction (Grant Line and Middle River) delayed fish releases for their study. Action: Oppenheim will check with FWS (Brandes) about this and report back.

**DOSS advice to WOMT and NMFS:** DOSS advises that implementation of the 4:1 I:E ratio continue through Tuesday, 5/31/11, per Action IV.2.1. From 6/1/11 through 6/15/11, DOSS advises that a 1:1 I:E ratio be implemented per Action IV.2.2.

DOSS also advises NMFS and WOMT that the steelhead loss density observed on 5/27/11 triggered an action response under Action IV.2.3 that requires that OMR flow be no more negative than -3500 cfs for at least 5 days. Because OMR flows have been positive under implementation of the 4:1 I:E ratio, no operations changes were necessary over the weekend to achieve this action response under Action IV.2.3. DOSS advises that Saturday, 5/28/11, be considered day 1 of the action response and that the projects operate such that OMR flows be no more negative than -3,500 cfs at least through Wednesday, 6/1/11 (the 5<sup>th</sup> day of the action response). After Wednesday, the OMR limit may be relaxed if the combined steelhead loss density at the fish facilities is reported as less than 8 fish/TAF for at least the last 3 consecutive days of the 5-day action response (and if no other fish density trigger is met).

<u>I:E implementation</u>: Byrne sent out this morning the track changes draft of the DOSS subgroup I:E implementation document. This is intended to be a DOSS document. She asked that the members please look at it and submit comments by close of business on Wednesday (6/1). Byrne will incorporate any comments and send the document back for review. We hope to sum up the implementation protocols next week for 2011 procedures and revisit them again next year.

<u>Fish Monitoring Data Needs</u>: Oppenheim asked that the members please review the spreadsheet presented last week and submit comments to him as soon as possible. He will try to get the final version to DOSS by next week.

**Next Meeting:** Conference call on Tuesday, 6/7/11, 9:00 a.m.